IN THE CLAIMS:

1. **(Previously Presented)** A multi-path torque coupling comprising:

an input shaft adapted to be connected to a source of torque;

an output shaft from which torque is delivered, said input shaft and said output shaft having a common axis of rotation;

a wet-plate clutch having first and second clutch members capable of rotating at different angular velocities, said wet-plate clutch configured for transferring torque between said first and second clutch members when engaged, said first clutch member being connected to said input shaft;

a pumping mechanism configured to engage said first and second clutch members of said wet-plate clutch responsive to said first and second clutch members rotating at different angular velocities;

a planetary set including first, second, third, and fourth elements organized about said common axis of rotation, said first element connected to said first clutch member and to said input shaft, said second element connected to said second clutch member, said third element connected to said output shaft, and said fourth element connected between said first element and said second element, and between said second element and said third element;

wherein said input shaft, said wet-plate clutch, said second element, said third element, said fourth element, and said output shaft define a first torque path through said multi-path torque coupling; and

wherein said input shaft, said first element, said third element, said fourth element, and said output shaft define a second torque path through said multi-path torque coupling.

2. (Previously Presented) The torque coupling of Claim 1 wherein said pumping mechanism is a gear pump, said pumping mechanism including an external gear coupled to said second clutch member and an internal gear coupled to said input shaft.

3. (Previously Presented) The torque coupling of Claim 1 wherein said pumping mechanism includes an axial cam plate coupled to said second clutch member and a piston pump disposed within a pump housing, said piston pump in operative relationship to said axial cam plate.

4. (Previously Presented) The torque coupling of Claim 1 wherein said first element is a ring element located around said common axis; wherein said second element is a sun element which rotates about said common axis; wherein said third element is a carrier element which rotates about said common axis; and wherein said fourth element is a planetary element located between, and engaged with, said sun and said ring elements, said planetary element disposed on said carrier element.

5. (Previously Presented) The torque coupling of Claim 1 further including a locking mechanism configured to maximize torque transfer between said input shaft and said output shaft.

6. (Previously Presented) The torque coupling of Claim 5 wherein said locking mechanism consists of a roller controlled bi-directional clutch.

7. (Previously Presented) The torque coupling of Claim 5 wherein said locking mechanism consists of a sprag controlled bi-directional clutch.

8. (Previously Presented) The torque coupling of Claim 5 wherein said locking mechanism consists of a strut controlled bi-directional clutch.

9. (Previously Presented) The torque coupling of Claim 5 wherein said locking mechanism is operatively disposed in parallel with said wet-plate clutch, between said first and second elements of said planetary set.

10. (Previously Presented) The torque coupling of Claim 5 wherein said locking mechanism is operatively disposed between said first and third elements of said planetary set.

11. (Previously Presented) The torque coupling of Claim 5 wherein said locking mechanism is operatively disposed between said second and third elements of said planetary set.

12. (Previously Presented) A torque coupling comprising:

an input shaft adapted to be connected to a source of torque;

an output shaft from which torque is delivered;

a clutch having first and second clutch members capable of rotating at different angular velocities, said clutch configured for transferring torque between said first and second clutch members when said first and second clutch members rotate at different angular velocities, said first clutch member being connected to said input shaft;

a locking mechanism configured to maximize torque transfer between said input shaft and said output shaft; and

a planetary set including first, second, third, and fourth elements organized about a common axis of rotation, said first element connected to said first clutch member and to said input shaft, said second element connected to said second clutch member, said third element connected to said output shaft, and said fourth element connected between said first element and said second element, and between said second element and said third element.

13. (Original) The torque coupling of Claim 12 wherein said locking mechanism is further configured to lock said first element and said second element about said common axis of rotation.

14. (Original) The torque coupling of Claim 12 wherein said locking mechanism is further configured to lock said first element and said third element about said common axis of rotation.

15. (Original) The torque coupling of Claim 12 wherein said locking mechanism is further configured to lock said second element and said third element about said common axis of rotation.

16. (Currently Amended) In an automotive vehicle having primary and secondary wheels, a power unit connected directly to the primary wheels, and a torque coupling connected between the power unit and the secondary wheels for apportioning torque between the primary and secondary wheels, said torque coupling comprising:

a torque modulating clutch,

a locking mechanism independent of said torque modulating clutch, and

a planetary set connected such that a locking mechanical path and a separate torque modulating clutch path exist through which torque is transferred between the

power unit and the secondary wheels, with the amount of torque transferred through the torque modulating clutch path in relation to the amount transferred through the locking mechanical path being variable by the torque modulating clutch,

whereby the apportionment of torque between the primary and secondary wheels is controlled by the torque modulating clutch and the independent locking mechanism.

17. (Previously Presented) The torque coupling of claim 1 wherein the pumping mechanism is a hydraulic pump self contained within the torque coupling and configured to increase and decrease hydraulic pressure responsive to an associated increase and decrease in the difference between the angular velocities of the first and second clutch members, wherein the transferred torque of the clutch is responsive to the increased hydraulic pressure of the pumping mechanism.

18. (Previously Presented) A multi-path torque coupling for coupling an input shaft adapted to be connected to a source of torque and an output shaft from which torque is delivered wherein the input shaft and said output shaft having a common axis of rotation, the torque coupling comprising:

a wet-plate clutch having first and second clutch members capable of rotating at different angular velocities, said wet-plate clutch configured for transferring torque between said first and second clutch members when engaged, said first clutch member being connected to said input shaft;

a pumping mechanism configured to engage said first and second clutch members of said wet-plate clutch responsive to said first and second clutch members rotating at different angular velocities;

a planetary set including a ring gear, a sun gear, carrier, and a planet gear, each of which is organized about the common axis of rotation, the ring gear is connected to the first clutch member and to the input shaft, the sun gear is connected to the second clutch member, the carrier is connected to the output shaft, the planet gear is connected between the ring gear and the sun gear and is also connected between the sun gear and the carrier,

wherein the clutch, the sun gear, the planet gear and the carrier are configured for providing a first torque path between the input shaft and the output shaft; and

wherein the ring gear, the planet gear and the carrier are configured for providing a second torque path between the input shaft and the output shaft.

19. (Previously Presented) The torque coupling of claim 18, further comprising a locking mechanism configured to maximize torque transfer between said input shaft and said output shaft through selectively bi-passing the first torque path and the clutch.

20. (Previously Presented) The torque coupling of claim 19 wherein the locking mechanism is a mechanical coupling of elements selected from the group consisting of the sun gear to the ring gear, the sun gear to the input shaft, the second clutch member to the ring gear, the second clutch member to the input shaft, the carrier to the ring gear, the carrier to the input shaft, the sun gear to the carrier, and the second clutch member to the carrier.

21. (Currently Amended) A multi-path torque coupling for coupling an input shaft adapted to be connected to a source of torque and an output shaft from which

torque is delivered wherein the input shaft and said output shaft having a common axis of rotation, the torque coupling comprising:

~~means for amplifying an angular velocity of the output shaft;~~

means for providing a mechanical clutch control responsive to [[a]] an amplified difference between [[the]] an ~~amplified~~ angular velocity of the output shaft and an angular velocity of the input shaft;

means for selectively transferring torque between the input shaft and the output shaft responsive to the provided clutch control; and

means for providing a locking engagement for mechanically transferring torque between the input shaft and the output shaft independent from the means for selectively transferring.